



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/814,122

04/01/2004

Takayuki Kondo

119127

8020

25944

7590

08/04/2006

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

MOONEY, MICHAEL P

ART UNIT

PAPER NUMBER

2883

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,122

Applicant(s)

KONDO, TAKAYUKI

Examiner

Michael P. Mooney

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-17 and 19 is/are allowed.
- 6) ☒ Claim(s) 18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 5/26/06 have been fully considered but they are not persuasive with respect to claim 18. Claim 18 is essentially the same as claim 1 except for reciting "an optical element with a light emitting or receiving device attached on the block by an adhesive" versus claim 1 reciting "an optical element with a light emitting or receiving surface attached to an outside surface of the block". The claim 1 recitation "attached to an outside surface of the block" patentably distinguishes said claim 1 over Regener et al. because there is no motivation for Regener et al. to attach a fiber to the outside surface of the block since Regener already teaches two v-grooves 9 for respectively inserting the fibers 10, 22 into the block. I.e., attaching the fibers to an outside surface of substrate/block 1 would not make sense in this instance since attachment via v-grooves already exists and, in Regener's invention, attachment to the outside of the block would be a more laborious process that is counter to the v-groove design.

On the other hand, Regener et al. would be motivated to use adhesive at the said v-grooves for the purpose of fixing the fibers in place in order to establish a more permanent coupling arrangement. This is detailed in the rejection infra.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2883

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Regener et al. (5726796) and further in view of Ackerman et al. (4892374).

Regener et al. teaches a fiber optic transceiver module (fig.), comprising: a block (1,36) including an optical waveguide (21, 33, 19, 23, 17, 16) including a branch having a blind end 33 and a concave guide 9 into which an optical fiber 22 is inserted and provided to at least one end of the optical waveguide (21, 33, 19, 23, 17, 16); and an optical element with a light emitting or receiving surface (e.g., see where fiber 10 abuts with branch 7 of the waveguide) attached on the block (fig.).

Regener et al. does not teach "by an adhesive".

Ackerman et al. teaches using an adhesive to secure a fiber in the V-groove of a substrate.

Regener et al. and Ackerman et al. are combined by taking the technology of Regener et al. which teaches a transceiver module with optical fiber element(s) in V-groove(s) and applying it to the adhesive-to-secure-fiber(s)-in-V-groove(s) technology of

Art Unit: 2883

Ackerman et al. to obtain the instant invention of a transceiver module with fiber(s) adhesively secured in V-groove(s). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make such a combination for the purpose of providing a module with a more permanently aligned/fixed connection. One of ordinary skill would have been motivated to make such a combination for the purpose of, e.g., making more durable/permanent connections.

Furthermore, Regener et al. teaches the optical element being a light emitting device or a light receiving device 10, the light emitting or receiving surface being disposed so as to face the other end of the optical waveguide (See where the end of branch 7 abuts optical fiber receiving/emitting element 10 in the figure).

Thus claim 18 is rejected.

Allowable Subject Matter

Claims 1-17, 19 are allowed.

The prior art, either alone or in combination, does not disclose or render obvious an optical element with a light emitting or receiving surface attached to an outside surface of the block in combination with the rest of claim 1 for the reasons stated by Applicant in the Remarks section filed 5/26/06.

It is noted that the claim 1 is allowable because the unique combination of each and every specific element stated in the claim.

The prior art, either alone or in combination, does not disclose or render obvious one end of the optical waveguide being exposed to a bottom of the guide and an other

Art Unit: 2883

end of the optical waveguide being exposed on a side face of the block in combination with the rest of claim 19 for the reasons stated by Applicant in the Remarks section filed 5/26/06.

It is noted that the claim 19 is allowable because the unique combination of each and every specific element stated in the claim.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael P. Mooney
Examiner
Art Unit 2883



Frank G. Font
Supervisory Patent Examiner
Art Unit 2883

FGF/mpm
7/28/06